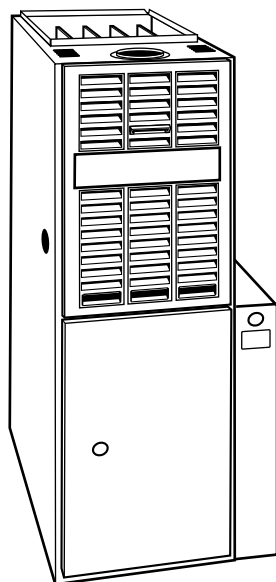


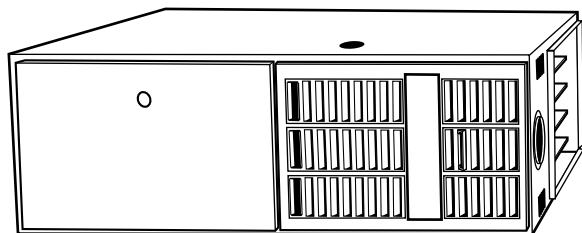


# PLUS 80t with Perfect Heat™ DELUXE UPFLOW/HORIZONTAL INDUCED-COMBUSTION FURNACE

**330JAV**  
California Approved  
Sizes 060 thru 120  
Series C & D



UPFLOW



HORIZONTAL

With a unique approach to induced-combustion design, a 40-in. tall cabinet, a 4-pass heat exchanger, an inshot burner system and its safety features, this furnace is without peer. The Plus 80t Upflow/Horizontal Furnace achieves an 80 percent Annual Fuel Utilization Efficiency (AFUE) rating. The benefits of Perfect Heat operation in reducing sound and improving comfort put it in a class well ahead of the competition. The Plus 80t has the kind of overall performance needed in today's homes. All models are GAMA efficiency rating certified and certified for use in California Air Quality Management Districts.

## FEATURES

**EFFICIENCY** — The Plus 80t Induced-Combustion Gas Furnace provides the efficiency customers want with 80.0 percent AFUE.

**MEDIA FILTER CABINET** — Enhanced indoor air quality in your home is made easier with our media filter cabinet—a standard accessory on all deluxe upflow furnaces. When installed as a part of your system, this cabinet allows for easy and convenient addition of a Bryant high-efficiency air filter.

**HOT SURFACE IGNITION** — No pilot to waste gas with this field-proven ignition system.

**ALUMINIZED HEAT EXCHANGER** — The patented 4-pass heat exchanger is made of aluminized steel and backed by a 20-year Limited Warranty.

**INTELLIGENT CONTROL** — The Plus 80t has an intelligent control that monitors the operation of the furnace. This control also has a component-test feature that enables the servicing technician to verify operation of the control; the high and low inducer; the hot surface ignitor; and high-, medium-, and low-speed blower operation. The control features a 3-amp fuse that protects the transformer and control. We guarantee the reliability of the control with a 3-year Limited Warranty.

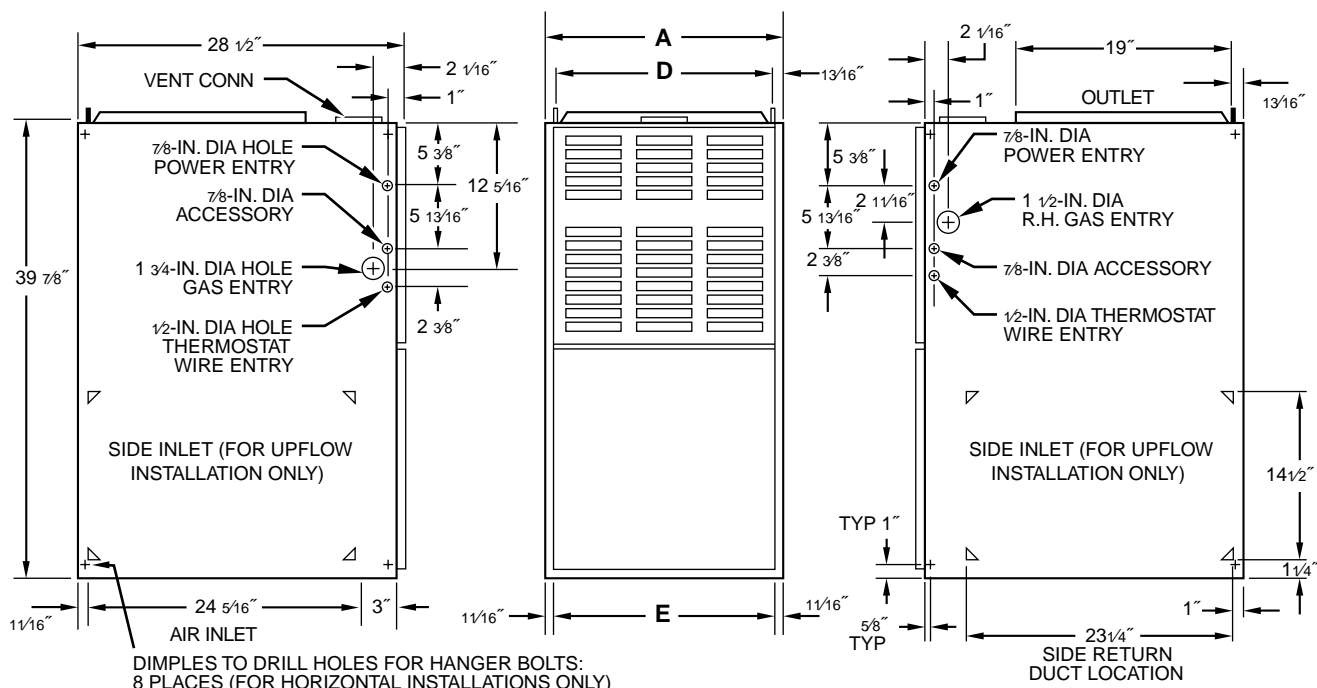
**40-IN. HEIGHT** — The Plus 80t cabinet height is only 40 in. This simplifies installation in alcoves, attics, basements (ideal for low basement), closets, and utility rooms, especially with a taller high-efficiency cooling coil.

**PREPAINTED CABINET** — The Plus 80t uses prepainted sheet metal for the cabinet. This is the same high-quality finish found on refrigerators and other appliances today. We ensure its durability by using a galvanized steel substrate to provide superior rust protection.

**PATENTED BLOCKED VENT** — Our induced-combustion furnace has a patented blocked vent safeguard. The switch will stop furnace operation if the vent system becomes blocked or is not operating properly. An exclusive with the Plus 80t furnace.

**EASY INSTALLATION** — The Plus 80t has many features that make installation easier: left or right gas and electrical connections, heating and cooling blower speed selector, matching coil sizes, accessory low-voltage connections, and many more. Certified for use in California Air Quality Management Districts.

**QUIET OPERATION** — A soft mount inducer assembly and 2-stage slow-opening gas valve reduce sound level. The two stages of heating capability minimizes furnace and air noise for total home comfort.



- NOTES:**
- Two additional 7/8-in. dia holes are located in the top plate.
  - Minimum return-air openings at furnace, based on metal duct. If flex duct is used, see flex duct manufacturer's recommendations for equivalent diameters.
    - For 800 CFM—16-in. round or 14 1/2 x 12-in. rectangle.
    - For 1200 CFM—20-in. round or 14 1/2 x 19 1/2-in. rectangle.
    - For 1600 CFM—22-in. round or 14 1/2 x 23 1/4-in. rectangle.
    - For airflow requirements above 1800 CFM, see Air Delivery table in Product Data literature for specific use of single side inlets. The use of both side inlets, a combination of 1 side and the bottom, or the bottom only will ensure adequate return air openings for airflow requirements above 1800 CFM.



A00358

### DIMENSIONS (In.)

UNIT SIZE	A	D	E	VENT CONN (Dia)*	SHIPPING WEIGHT (Lb)	MEDIA CABINET SUPPLIED
036060	14-3/16	12-9/16	12-11/16	4	134	16"
048080	21	19-3/8	19-1/2	4	154	20"
048100	21	19-3/8	19-1/2	4	166	20"
060100	24-1/2	22-7/8	23	4	184	24"
060120	24-1/2	22-7/8	23	5†	194	24"

\* Refer to the furnace Installation Instructions for proper venting procedures.

† Oval collar

## MINIMUM INCHES CLEARANCE TO COMBUSTIBLE CONSTRUCTION

This forced air furnace is equipped for use with natural gas at altitudes 0-5,500 ft. (0-1,675 m) above sea level. The high-altitude conversion kit **MUST** be installed above 5,500 ft (1,675 m). See the furnace installation instructions for high altitude gas input derating requirements.

An accessory kit, supplied by the manufacturer, shall be used to convert to propane gas use or may be required for some natural gas applications.

This furnace is for indoor installation in a building constructed on site.

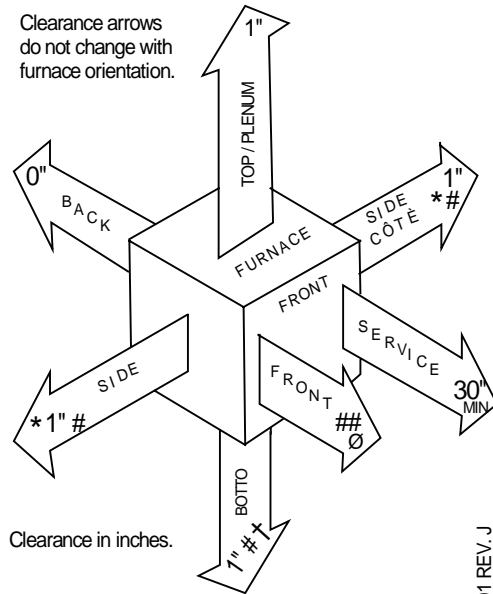
This furnace may be installed on combustible flooring in alcove or closet at minimum clearance from combustible material.

This furnace may be used with a Type B-1 Vent and may be vented in common with other gas-fired appliances.

- # For horizontal furnaces wider than 14.25 inches (362mm) may be 0 inches.
- † For upflow furnaces bottom clearance may be 0 inches.
- \* Indicates supply or return sides when furnace is in the horizontal position. Line contact only permissible between lines formed by intersections of the Top and two Sides of the furnace jacket, and building joists, studs or framing.
- Ø 18 inches front clearance required for alcove.
- # # For single wall vent 6 inches.  
For Type B-1 vent 3 inches.

This furnace is approved for UPFLOW and HORIZONTAL installations.

Clearance arrows do not change with furnace orientation.



Clearance in inches.

Vent Clearance to combustibles:  
For Single Wall vents 6 inches.  
For Type B-1 vent 1 inch.

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## CONTROLS—THERMOSTATS AND ZONING

THERMOSTAT—NON-PROGRAMMABLE	Auto Changeover, °F/°C, 1-Stage Heat/1-Stage Cool —TSTATBBNAC01-B Auto Changeover, °F/°C, 2-Stage Heat/1-Stage Cool —TSTATBBNHP01-B Auto Changeover, °F/°C, 2-Stage Heat/2-Stage Cool —TSTATBBN2S01-B in AC Mode, 3-Stage Heat/2-Stage Cool in HP Mode Air Conditioner, 1-Stage Heat/1-Stage Cool. Manual Changeover, °F/°C —TSTATBBBAC01 Heat Pump, 2-Stage Heat/1-Stage Cool. Manual Changeover, °F/°C —TSTATBBBHP01*
THERMOSTAT—PROGRAMMABLE	Auto Changeover, 7-Day Programmable, °F/°C, 1-Stage Heat/1-Stage Cool —TSTATBBPAC01-B Auto Changeover, 7-Day Programmable, °F/°C, 2-Stage Heat/1-Stage Cool —TSTATBBPHP01-B Auto Changeover, 7-Day Programmable, °F/°C, —TSTATBBP2S01-B 2-Stage Heat/2-Stage Cool in AC Mode, 3-Stage Heat/2-Stage Cool in HP Mode Dual Fuel Thermostat. Includes Outdoor Air Temperature Sensor —TSTATBBPDF01-B* Thermidistat™ Control — Non-Programmable/Programmable —TSTATBBPRH01-B* Thermostat with Humidity Control (For use in Dual Fuel, AC, HP, and 2S applications. Includes Outdoor Air Temperature Sensor.)
ZONING—2-ZONE	ZONEBB2KIT01, ZONEKIT2ZBDP
ZONING—4-ZONE	ZONEBB4KIT01
ZONING—8-ZONE	ZONEBB8KIT01

\* Do not use in zoning heat pump applications.

## SPECIFICATIONS

UNIT SIZE		036060	048080	048100	060100	060120
RATINGS AND PERFORMANCE						
Gas Input (Btuh)*	High Stage	60,000	80,000	100,000	100,000	117,000
	Low Stage	39,000	52,000	65,000	65,000	78,000
Output Capacity (Btuh)†	High Stage	48,000	65,000	81,000	81,000	95,000
	Low Stage	31,000	42,000	53,000	53,000	63,000
Nonweatherized ICS						
AFUE%‡	Nonweatherized ICS	80.0	80.0	80.0	80.0	80.0
Certified Temperature Rise Range (°F)	High Stage	25—55	30—60	40—70	25—55	40—70
	Low Stage	15—45	15—45	20—50	15—45	25—55
Certified External Static Pressure	Heat/Cool	0.12/0.50	0.15/0.50	0.20/0.50	0.20/0.50	0.20/0.50
Airflow CFM‡	Heating High/Low	1170/1000	1445/1260	1410/1265	1800/1460	1775/1500
	Cooling	1195	1740	1575	2250	2025
ELECTRICAL						
Unit Volts— Hertz— Phase		115—60—1				
Operating Voltage Range		104—127				
Maximum Unit Amps		10.6	13.4	13.2	17.7	18.2
Maximum Wire Length (Measured 1 Way) Ft		34	27	28	32	31
Minimum Wire Size		14		14	12	12
Maximum Fuse or Ckt Bkr Size‡‡		15		15	20	20
Transformer (24v)		40va				
External Control	Heating	19va				
	Cooling	35va				
Power Available						
Air Conditioning Blower Relay		Standard				
CONTROLS						
Limit Control		SPST (Auto-Reset)				
Heating Blower Control		Solid-State Time Operation				
Inducer		2-Speed				
Burners (Monoport)		3	4	5		6
Gas Connection Size		1/2-in. NPT				
GAS CONTROLS						
2-Stage Redundant Gas Valve		White-Rodgers				
	Min Inlet Pressure (In. wc)	4.5 (Natural Gas)				
	Max Inlet Pressure (In. wc)	13.6 (Natural Gas)				
Ignition Device		Hot Surface				
BLOWER DATA						
Direct-Drive Motor HP (PSC)		1/3	1/2	1/2	3/4	3/4
Motor Full Load Amps		5.1	7.4	7.9	11.0	11.1
RPM (Nominal)—Speeds		1075—4	1075—5	1075—4	1075—5	1075—4
Blower Wheel Diameter x Width (In.)		10 x 6	10 x 8	10 x 8	11 x 10	11 x 10
Filter Size (In.)—Permanent Washable (Supplied)		(1) 16 x 25 x 1	(1) 20 x 25 x 1	(1) 20x 25 x 1	(1) 24 x 25 x 1	(1) 24 x 25 x 1
FACTORY-AUTHORIZED DEALER-INSTALLED ACCESSORIES						
Twinning Kit		N/A	KGATW0301HSI			
High-Altitude Pressure Switch Kit**		KGAHA5501PSW				
Gas Conversion Kit—Natural-to-Propane††		KGANP26012SP				
Gas Conversion Kit—Propane-to-Natural††		KGAPN21012SP				
Bryant Media Filter (2 pack)		FILBBFTC0016	FILBBFTC0020		FILBBFTC0024	

\* Gas input ratings are certified for elevations to 2000 ft. For elevations above 2000 ft, reduce ratings 4 percent for each 1000 ft above sea level. Refer to National Fuel Gas Code Table F4 or furnace Installation Instructions. In Canada, derate the unit 10 percent for elevations 2000 ft to 4500 ft above sea level.

† Capacity in accordance with U.S. Government DOE test procedures.

‡ • Airflow shown is for bottom only return-air supply with factory-supplied 1-in. washable filter(s).

• For air delivery above 1800 CFM, see Air Delivery table for other options.

• An airflow reduction of up to 7% may occur when using the factory-specified 4 5/16-inch wide, high efficiency media filter. See filter media product data for exact pressure drop data.

• For best furnace efficiency when using the 4 5/16-inch wide media filter, adjust the blower speed tap to near the mid-point of the rise range.

\*\* 5500 ft and higher above sea level.

†† Factory-authorized and field installed. Gas conversion kits are C.S.A. (A.G.A. and C.G.A.) approved.

‡‡ Time-delay type is recommended.

ICS—Isolated Combustion System

N/A—Not Applicable

### AIR DELIVERY— CFM (With Filter)\*

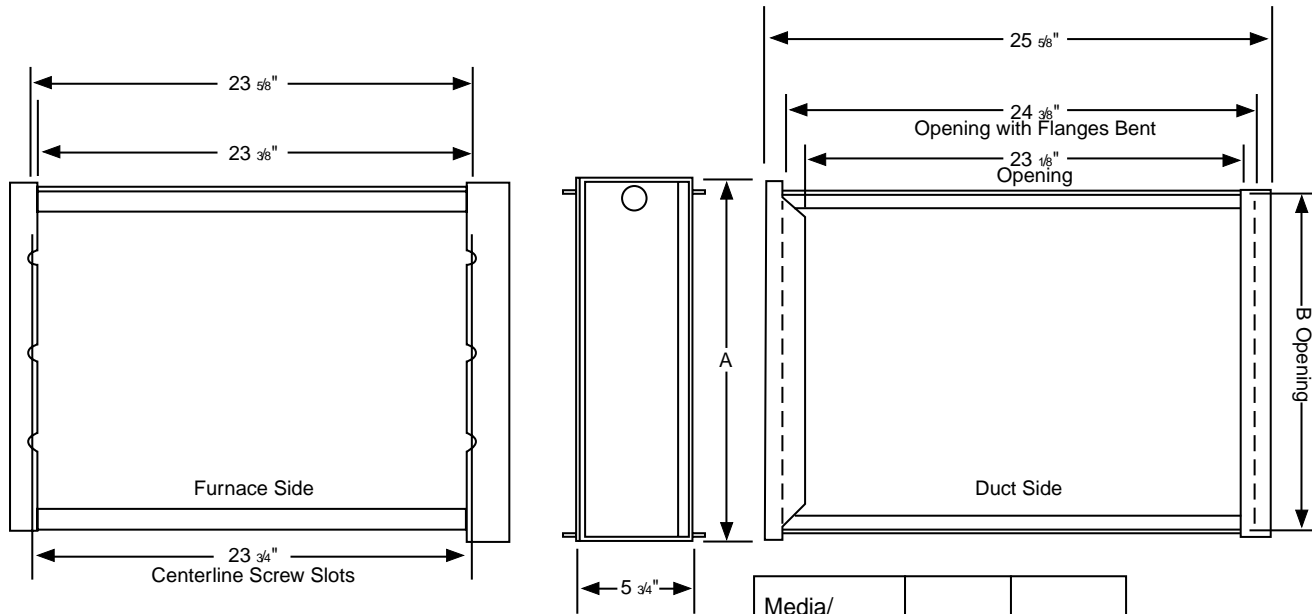
UNIT SIZE	RETURN-AIR SUPPLY	SPEED	EXTERNAL STATIC PRESSURE (IN. WC)							
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
036060	Bottom or 1 Side	High	1430	1380	1325	1265	1195	1125	1045	945
		Med-High	1170	1150	1135	1105	1055	995	925	845
		Med	1000	1000	990	970	935	885	835	750
		Med-Low	865	870	855	840	815	780	720	655
		Low	685	690	680	665	645	610	570	500
048080	Bottom or 1 Side	High	2010	1950	1875	1810	1740	1660	1550	1455
		Med-High	1675	1660	1625	1600	1545	1490	1395	1295
		Med	1445	1430	1415	1400	1370	1325	1265	1170
		Med-Low	1260	1260	1260	1250	1210	1180	1115	1030
		Low	950	985	985	970	950	915	845	740
048100	Bottom or 1 Side	High	1880	1815	1745	1690	1575	1500	1400	1265
		Med-High	1660	1615	1570	1505	1435	1355	1260	1170
		Med-Low	1455	1410	1375	1350	1290	1235	1145	985
		Low	1265	1265	1240	1210	1180	1110	995	855
060100	Bottom Only	High	2485	2480	2405	2330	2250	2155	2025	1905
		Med-High	2165	2135	2105	2055	1995	1915	1830	1735
		Med	1785	1800	1785	1760	1725	1665	1600	1490
		Med-Low	1465	1460	1470	1460	1425	1385	1330	1255
		Low	1220	1215	1210	1195	1180	1150	1095	1020
	Both Sides or 1 Side and Bottom	High	—	2465	2420	2355	2265	2165	2065	1940
		Med-High	2145	2145	2135	2090	2025	1955	1870	1780
	1 Side Only	High	2410	2345	2275	2185	2095	1995	1875	1760
		Med-High	2140	2100	2050	1985	1920	1835	1740	1635
060120	Bottom Only	High	—	2260	2185	2085	2025	1935	1835	1730
		Med-High	2110	2070	2015	1960	1885	1810	1715	1620
		Med-Low	1790	1775	1755	1720	1670	1610	1535	1455
		Low	1495	1500	1515	1485	1450	1400	1345	1270
	Both Sides or 1 Side and Bottom	High	2425	2360	2275	2195	2095	2010	1890	1775
		Med-High	2055	2035	1995	1945	1880	1810	1735	1640
	1 Side Only	High	2245	2175	2070	1980	1900	1805	1695	1575
		Med-High	2050	1985	1925	1850	1765	1690	1585	1480

\* Side return to be used for upflow applications only. A filter is required for each return-air supply opening.

— Indicates unstable operating conditions.

Airflow shown is with factory supplied 1-in. washable filter(s). An airflow reduction of up to 7% may occur when using the 4 5/16-inch wide, high-efficiency media filter. For best furnace efficiency when using the 4 5/16-inch wide media filter, adjust the blower speed tap to near the mid-point of the rise range.

## MEDIA FILTER CABINET



Media/ Filter Cabinet	A	B
16"	17	16"
20"	21	20"
24"	25	24"

A00309



**MEETS DOE RESIDENTIAL  
CONSERVATION SERVICES  
PROGRAM STANDARDS.**

**Before purchasing this appliance,  
read important energy cost and  
efficiency information available  
from your retailer.**



**REGISTERED  
QUALITY SYSTEM**





SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

UNIT MUST BE INSTALLED IN ACCORDANCE  
WITH INSTALLATION INSTRUCTIONS

Cancels: PDS 330J.60.6